| AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT | 1. CONTRACT ID CODE | PAGE 1 OF 8 |
|---|---|---|

| 2. AMENDMENT/MODIFICATION NO. | 3. EFFECTIVE DATE | 4. REQUISITION/PURCHASE REQ. NO. | 5. PROJECT NO. *(If applicable)* |
|---|---|---|---|
| A001 | 06/04/2008 | | |

| 6. ISSUED BY CODE | 7. ADMINISTERED BY *(If other than Item 6)* CODE |
|---|---|
| **U.S. Embassy Baghdad**<br>**Presidential Palace – Room M-106**<br>**Baghdad, Iraq** | |

| 8. NAME AND ADDRESS OF CONTRACTOR *(NO., street,city,county,State,and ZIP Code)* | | 9a. AMENDMENT OF SOLICITATION NO. |
|---|---|---|
| | | S-IZ100-08-R-0271 |
| | X | 9b. DATED *(SEE ITEM 11)* |
| | | 06/01/2008 |
| | | 10a. MODIFICATION OF CONTRACT/ORDER NO. |
| | | 10b. DATED *(SEE ITEM 13)* |

11. **THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

☑ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers

☐ is extended, ☑ is not extended

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning ___1___ copies of the amendment;(b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. **FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.** If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. **ACCOUNTING AND APPROPRIATION DATA** *(If required)*

13. **THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

| | |
|---|---|
| | A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A. |
| | B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b) |
| | C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: |
| | D. OTHER *(Specify type of modification and authority)* |

E. **IMPORTANT:** Contractor [] is not, [ ] is required to sign this document and return ___ copies to the issuing office.

14. **DESCRIPTION OF AMENDMENT/MODIFICATION** *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

The purpose of this amendment is to replace Section J, Attachment 5, Scope Of Work And Estimated Bill Of Materials, Revision 2 in its entirety with Attachment 5, Scope Of Work And Estimated Bill Of Materials, Revision 3.

Continued on page 2

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

| 15A. NAME AND TITLE OF SIGNER *(Type or print)* | | 16A. NAME OF CONTRACTING OFFICER | |
|---|---|---|---|
| | | **Alan J. Monetta** | |
| 15B. NAME OF CONTRACTOR/OFFEROR<br>BY _____<br>*(Signature of person authorized to sign)* | 15C.DATE SIGNED | 16B. UNITED STATES OF AMERICA<br>BY _____<br>*(Signature of Contracting Officer)* | 16C.DATE SIGNED<br>June 4, 2008 |

## SCOPE OF WORK AND ESTIMATED BILL OF MATERIALS
## CONSTRUCT FUEL INFILL HEADERS
## NEC, IZ, IRAQ

(Revision 3, June 04 2008)

### 1. AIM

The aim of this Statement of Work (SOW) is for a Contractor to construct a fuel intake header system in the New Embassy Compound in the International Zone of Baghdad, Iraq.

### 2. BACKGROUND

The present fuel intake header system has two major problems: First it is located along Al Kindhi Street which is a very high security risk, and second, the present pumping method is excruciatingly slow, thus prolonging the fuel truck's exposure to insurgent attacks.

### 3. SOLUTION

Installing a new fuel intake header in the vehicle parking lot outside the perimeter wall north of the West Service CAC and equipping it with a high speed pumping system, would greatly reduce to security problem faced by the pumping crews and fuel trucks. See **Appendix A - NEC Fuel Infill Headers Site Plan** below.

### 4. DESIGN ASSUMPTIONS AND CRITERIA

1. T-walls shown in **Appendix A - NEC Fuel Infill Headers Site Plan** are to be supplied and placed by RSO.
2. Elevations taken from as-builts are sufficiently accurate but need field verification.
3. Existing utilities shown on the site plan are sufficiently accurate but need field verification.
4. Plumbing system design to be in accordance with the latest version of the International Plumbing Code (IPC) and OBO Design Requirements and Specifications.
5. All FRP (fiberglass reinforced plastic) corrosion resistant pipes to meet or exceed Voluntary Product Standard PS 15-69, ASTM 3982 "Standard Specification for Contact Molded Fiberglass Duct and Hoods".

### 5. STATEMENT OF WORK

The intent of this project is to install a new fuel intake header in the vehicle parking lot outside the perimeter wall north of the West Service CAC and equip it with a high speed pumping system. The SOW includes the following items:

**5.1. Parking Lot Modifications** - Remove existing curbs and sidewalks and construct concrete slabs to form a drive-thru fuel dispensing point.

**5.2. Fuel Infill Header** – Bore through existing perimeter wall, insert two fill panels, top seal, cap and entry boot connected to 100mm FRP pipe extending through the wall and down to the haunch level of the interior perimeter wall and install a transition sump to allow connection to fuel transfer pipe.

**5.3. Fuel Transfer Pipe** - Install 100mm FRP fuel transfer pipe in 150mm FRP containment pipe from each transition sump to fuel pumps, running both pipes along the perimeter wall haunch. Protect pipe profiles with 1.5m high concrete barriers.

**5.4. Pumping System** – Provide a minimum of 500 liters per minute (LPM) factory assembled, fuel oil transfer system (FOT). Manufacturer will have sole source responsibility for the packaged system. Electrical power for the FOT will be from the existing Utility Power Plant. The packaged pumping system shall be factory assembled and tested with schedule 40 steel system piping, with a steel drip pan and vacuum pressure

gauge on the suction connection. It shall be cleaned and painted with high grade shop enamel. Each pump shall be rated for 100% of flow. The pumps shall be cast iron positive displacement close coupled internal gear type, equipped with mechanical seal. Each pump shall include a flexible type coupling with a TEFC motor rated for duty in a 50 deg C ambient. Each pump shall include two piece bronze 600psi WOG non-shock, ball valve isolation valves, bronze check valve, bronze relief valve, cast iron basket strainer with stainless steel basket and hand screw type cover. Provide a NEMA 3 system pump controller mounted and wired to contain: Single point power connection; Individual motor fuse blocks with fuses or breakers; across the line magnetic starters with overload protection and resets; A/B pump selector switch; pump running pilot lights; numbered terminal strip; wiring diagrams. Controls system from existing fuel transfer station will be extended to the new motor starter/disconnect and termination point for start/stop commands. Provide a fiberglass enclosure. Basis of design: NECO pumping systems Series FOT, twin pump fuel oil transfer system.

## 6. PERFORMANCE PERIOD

The Contractor is to complete construction within 91 days from the notice to proceed (NTP).

## 7. APPENDICES

Appendix A - NEC Fuel Infill Headers Site Plan

## 8. ESTIMATED BILL OF MATERIALS (BOM)

| No | Descriptions | Unit | Qty | Unit Price $ | Total Price $ |
|---|---|---|---|---|---|
| **1** | **Administration** | | | | |
| 1 | Mobilization/Demobilization. | LS | 1 | | |
| | **Administration** | | | **Sub-Total** | |
| **2** | **Parking Lot Modifications** | | | | |
| 1 | Remove existing curbs and sidewalks for reuse or storage as directed by the Engineer. | LM | 32 | | |
| 2 | Excavate 200mm deep over the area in which the slab will be constructed. | $m^3$ | 46 | | |
| 3 | Using proper methods, compact entire subgrade area to 90% Modified Proctor maximum density prior to placing crushed base material. | $m^2$ | 229 | | |
| 4 | Backfill under proposed slab with 100mm of clean granular soil from the excavation. Use proper compaction methods to bring it to 95% Modified Proctor maximum density. All excess material shall be disposed of as directed by the Engineer. | $m^3$ | 23 | | |
| 5 | Supply and place 100mm layer of crushed base material, maximum size | $m^3$ | 23 | | |

| | | | | | |
|---|---|---|---|---|---|
| | 40mm, under the proposed slab and properly compact to 95% Modified Proctor maximum density. | | | | |
| 6 | Provide and place 0.6mm layer of polyethylene under proposed slab. | $m^2$ | 229 | | |
| 7 | Supply and place 150mm concrete with a 28 day compressive strength of 25MPa with sulphate resisting, steel reinforced cement Type 5 on crushed gravel base provided for in item above. Concrete surface shall have float finish to provide a nonslip surface. | $m^3$ | 35 | | |
| 8 | Furnish labor and equipment and cut transverse control joints in concrete slab at seven meter intervals, with grooves 5mm wide by 40mm deep. Clean and fill grooves with cold two part polysulphide resin mix applied with mastic gun. | LM | 9 | | |
| 9 | Place curbing along edges of new concrete pavement utilizing both new and salvaged curbing. | LM | 75 | | |
| 10 | Provide materials and paint 100mm wide lane striping, and other required markings on concrete slabs using traffic grade paint white in color. | LS | 1 | | |
| | **Parking Lot Modifications** | | | **Sub-Total** | |
| **3** | **Fuel Infill Headers** | | | | |
| 1 | Supply materials, bore through 300mm thick reinforced concrete perimeter wall, and install two remote fill panels such as Fairfield Industries Model #FRP-24F/2P-4 with 13mm dia. steel drain pipe with valve mounted on exterior side of wall, one 400mm above the 500mm thick haunch on interior side, and one 300mm above, each complete with 600Hx600Wmm access door. | Ea | 2 | | |
| 2 | Furnish materials and install in each remote fill panel a 100mm top seal fill cap and adapter with flexible entry boot connected to 100mm FRP pipe to reach beyond the interior side of the perimeter wall and down to a proper level above the haunch. Install unions, elbows, S x F sleeves, and 150mm entry boot into a transition sump to allow connection to 100mm FRP pipe in 150mm FRP containment pipe. | Ea | 2 | | |
| | **Fuel Infill Headers** | | | **Sub-Total** | |

| | | | | | |
|---|---|---|---|---|---|
| **4** | **Fuel Transfer Pipes** | | | | |
| 1 | Provide and install 100mm FRP fuel transfer pipe in 150mm FRP containment pipe from each transition sump to fuel pumps, running both pipes along the perimeter wall haunch, using proper adhesive system. Pipe should withstand direct sun temperatures in Iraq summers. Price includes all necessary wall brackets, saddles, and fasteners. | LM | 160 | | |
| 2 | For protection, furnish and install 1.5m high Colorado type concrete barriers set on the ground to run alongside the fuel transfer pipe profile from the transition sump to the new fuel pumps. | LM | 80 | | |
| | **Fuel Intake Pipes** | | | **Sub-Total** | |
| **5** | **Pumping System** | | | | |
| 1 | Excavate 200mm deep over the area in which the equipment pad will be constructed. | $m^3$ | 0.5 | | |
| 2 | Using proper methods, compact entire subgrade area to 90% Modified Proctor maximum density prior to placing crushed base material. | $m^2$ | 2 | | |
| 3 | Backfill under proposed equipment pad with 100mm of clean granular soil from the excavation. Use proper compaction methods to bring it to 95% Modified Proctor maximum density. All excess material shall be disposed of as directed by the Engineer. | $m^3$ | 0.5 | | |
| 4 | Supply and place 100mm layer of crushed base material, maximum size 40mm, under the proposed slab and properly compact to 95% Modified Proctor maximum density. | $m^3$ | 0.5 | | |
| 5 | Provide and place 0.6mm layer of polyethylene under proposed slab. | $m^2$ | 2 | | |
| 6 | Supply and place 150mm concrete equipment pad with a 28 day compressive strength of 25MPa with sulphate resisting, steel reinforced cement Type 5 on crushed gravel base provided for in item above. Concrete shall have float finish to provide a level surface for equipment anchoring. | $m^3$ | 0.3 | | |
| 7 | Provide and install a minimum of 500 liters per minute (LPM) factory assembled, fuel oil transfer system (FOT). Manufacturer will have sole | LS | 1 | | |

| | | | | | |
|---|---|---|---|---|---|
| | source responsibility for the packaged system. Electrical power for the FOT will be from the existing Utility Power Plant. The packaged pumping system shall be factory assembled and tested with schedule 40 steel system piping, with a steel drip pan and vacuum pressure gauge on the suction connection. It shall be cleaned and painted with high grade shop enamel. Each pump shall be rated for 100% of flow. The pumps shall be cast iron positive displacement close coupled internal gear type, equipped with mechanical seal. Each pump shall include a flexible type coupling with a TEFC motor rated for duty in a 50 deg C ambient. Each pump shall include two piece bronze 600psi WOG non-shock, ball valve isolation valves, bronze check valve, bronze relief valve, cast iron basket strainer with stainless steel basket and hand screw type cover. | | | | |
| 8 | Supply and install a NEMA 3 system pump controller mounted and wired to contain: Single point power connection; individual motor fuse blocks with fuses or breakers; across the line magnetic starters with overload protection and resets; A/B pump selector switch; pump running pilot lights; numbered terminal strip; wring diagrams. Controls system from existing fuel transfer station will be extended to the new motor starter/disconnect and termination point for start/stop commands. Provide a fiberglass enclosure. Basis of design: NECO pumping systems Series FOT, twin pump fuel oil transfer system. | LS | 1 | | |
| | | | | | |
| | **Pumping System** | | | **Sub-Total** | |
| **6** | **DBA Insurance** | | | | |
| 1 | Contractor shall cover each of its workers at the site with DBA Workers' Compensation coverage, and require its subcontractors to do the same. Contractor must furnish certificate evidencing this coverage to Engineer prior to starting work. | LS | 1 | | |
| | **DBA Insurance** | | | **Sub-Total** | |

| | | | | | |
|---|---|---|---|---|---|
| | **Items 1 thru 6** | | | **Sub-Total** | |
| | | | | G & A | |
| | | | | Sub-Total | |
| | | | | Profit | |
| | | | | **Contract Cost** | |

## APPENDIX A

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